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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,174	10/13/2006	Bruno Pasquale Franco Nardo	01213/0203491-US0	1175

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EXAMINER	
HAYMAN, IMANI N	
ART UNIT	PAPER NUMBER
3767	

MAIL DATE	DELIVERY MODE
05/28/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/553,174	NARDO ET AL.	
	Examiner	Art Unit	
	IMANI HAYMAN	3767	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 January 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11,13 and 15-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11,13 and 15-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 11, 13, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al. (US Patent No. 6,336,910 B1) in view of Duffy et al. (US Patent No. 5,282,466).

Regarding claim 11, Ohta et al. discloses the invention substantially as claimed suitable for a machine for regeneration of a human liver; comprising at least two catheters (12, 16; figure 1); an extracorporeal circuit (extracorporeal circulation apparatus; figure 1) configured to connect first and second catheters of the at least two catheters with at least an oxygenation device (fluid supply pump (1)) connected to said extracorporeal circuit (figure 1); said oxygenation device being suitable to introduce oxygen into blood in extracorporeal circulation in said circuit (column 4, lines 37-67). Examiner notes that the fluid supply pump is capable of injecting diluent and water comprised of part oxygen is a commonly known diluent. However, Ohta et al. fails to disclose a control device explicitly as claimed. Duffy et al. discloses a control device (electronic module (3)) configured to provide feedback control so as to regulate a quantity of oxygen provided to the oxygenation device (column 5, lines 8-16); and the control device further configured to measure hematocrit (column 5, lines 8-16) and a partial pressure of molecular oxygen in the blood in extracorporeal circulation (column 5, lines 8-25). Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Ohta et al. with the electronic module as taught by Duffy et al. to measure the oxygen saturation and hematocrit in blood passing through the extracorporeal blood circuit.

Regarding claim 13, Ohta et al. discloses the machine wherein there are also means for hemofiltration of the blood in extracorporeal circulation (column 10, lines 35-38).

Regarding claim 15, Ohta et al. discloses the machine wherein there are also means designed to heat the blood in extracorporeal circulation (column 3, lines 50-60).

Regarding claim 16, Ohta et al. discloses the machine wherein there are also means designed to introduce anticoagulating substances into the blood in extracorporeal circulation (heparin supplier (19)).

Regarding claim 17, Ohta et al. discloses the machine wherein there are also means to detect and eliminate any air bubbles present in the blood in extracorporeal circulation (drop chamber (9) is configured for bubble removal (column 5, lines 50-54).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IMANI HAYMAN whose telephone number is (571)270-5528. The examiner can normally be reached on MONDAY THRU FRIDAY 7:30 AM TO 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KEVIN SIRMONS can be reached on 571-272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/I. H./
Examiner, Art Unit 3767
/Kevin C. Sirmons/
Supervisory Patent Examiner, Art Unit 3767